

Physiological Reviews

INDEX

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Guide to Use of Index

AN INDEX always represents a compromise between the indexer's desire to arrange information in neat parcels and the reader's urgent wish to find what he wants quickly under the term which comes first to his mind. In this index, we have attempted to consider the reader's desires first without sacrificing reasonable economy and bulk.

It is hoped that users will read this introduction carefully since it explains the way in which the index has been arranged, and an understanding of this arrangement will add greatly to the ease of usage.

PART I | PRINCIPLES

The author and subject index have been combined in one alphabet. The subject index resembles that of *Chemical Abstracts*. The phrases modifying the subject headings have been made as short as possible—in each case only the major aspect of the paper in relation to the specific subject heading is given. For example, a paper entitled "Yawning and Associated Phenomena" would be indexed under YAWNING with the phrase, associated phenomena, but with no mention in this place that heart rate was one phenomenon studied, as well as vasoconstriction in toe and finger. Entries would also be made under HEART RATE, VASOCONSTRICTION as well as under TOE and FINGER.

In most cases the specific not the general subject heading has been chosen for the index. When a general subject heading has been used, the material listed under it is of so general a nature as to preclude the use of a specific heading. The user wishing all material on a given broad subject, such as antihistaminics, should look in the list of subject headings in PART II for the names of antihistaminic substances and then look in the index under each of the subject headings given.

Wherever practical the page number used refers to the exact page in the article on which the information is to be found, or when a given piece of information is mentioned more than once, the *first* page on which it is mentioned. Where it was not practical to do this, the reference is to the first page of the paper.

Many of the subject headings are followed by a definitive word or phrase such as PROTEIN (DIETARY), PROTEIN (AS TISSUE CONSTITUENT).

For every paper the following items studied or described by the investigators were indexed:

- | | |
|---------------------------------------|---|
| 1) Organ or anatomical system | 4) Special tests, measurements, and apparatus |
| 2) Physiological states and functions | 5) Chemical substances or compounds |
| 3) Pathological condition | 6) Species of animals |

1) **Organ or Anatomical System** Wherever possible, the anatomical entries appear under the name of the organ or system, not under the adjective referring to that organ or system—e.g. *stomach* rather than *gastric*, *liver*, not *hepatic*. This rule has been modified, however, to take care of usage, we normally speak and write of *cardiac output*, not *heart output*. In cases such as the latter, if the bulk of material was small enough, the papers have been indexed in both places, i.e. under CARDIAC OUTPUT and under HEART, whenever the bulk of material made such double entry impractical, cross references are given.

Large groups of entries under an organ have been broken into small groups for ease of searching. Where a paper seemed to fit equally well into two of the small groups, an entry has been made in each group. This does not mean, however, that

all entries under HEART METABOLISM deal only with metabolism or, conversely, that none of the other papers under HEART—have anything to do with metabolism. The user should bear in mind that these groupings are relative and are primarily to aid searching. For a definitive search of all material on *metabolism of the heart*, all of the entries under HEART—must be scanned.

2) **Physiological States and Functions** We have followed common usage in choosing subject headings in this category, regardless of the merits of less popular synonyms—e.g. *anoxia* not *hypoxia*. The less commonly used terms have been included with a *see* reference to the more popular terms. In cases where the bulk of material was too large to duplicate under both the anatomical and the physiological heading, the anatomical heading has been given preference.

3) **Pathological Condition** The same policy as in (2) above has been used with names of diseases and pathological conditions.

4) **Special Tests, Measurements and Apparatus**. New apparatus, tests and methods of determination have been indexed under the thing measured, and/or under the name of the apparatus or test.

5) **Chemical Substances or Compounds** The adequate indexing of pharmacologically active compounds is one of the most difficult problems in an index such as this one. A compound may have a chemical name, one or more trade names, a name approved by the AMA Council on Pharmacy, a common name and a pharmaceutical house number such as F933 (the Torneau number for 2-Piperidylmethyl), 11,4-Benzodioxan). An author may use one or more of these names in a paper, a user of the index may know only one of them. We have attempted to list the references to a drug under the most commonly used term, judging in part from the use of such terms in this journal. In addition we have provided a cross-reference pattern from the other names. Users are referred to the index to Vol. I, Part II, of *Excerpta Medica* for a more detailed list of synonyms of currently used drugs.

In regard to the chemical names we have used the names preferred by *Chemical Abstracts*, but have arranged them in direct rather than in inverted order. *Chemical Abstracts* uses PYRIDINE, 2-[(DIETHYLAMINOETHYL)-2-THIENYLAMINO] as an entry, in this index that compound would appear as 2-[(2-DIETHYLAMINOETHYL)-2-THIENYLAMINO], PYRIDINE and would be alphabetized under DI. Substituted compounds of the same parent chemical structure with similar pharmacological properties have been grouped under the name of the parent compound to save duplication of entries, e.g. all androstenediols such as $3\alpha,17\beta$, *acetate-3 Androstenediol* are entered under ANDROSTANEDIOLS. If an author has used a chemical name other than the preferred one, that name has also been included in the index with the necessary cross reference.

As with the anatomical headings, many large groups of entries have been broken into smaller groups for convenience in searching, e.g. PROTEIN (DIETARY), PROTEIN (AS TISSUE CONSTITUENT), PROTEIN METABOLISM. The entries in these small groups are not mutually exclusive, and if a complete search for protein metabolism is needed all of the groups must be scanned.

6) **Species of Animal** Where data pertaining to a given animal are given in a paper, the paper is indexed under the name of the animal, e.g. rabbit (Where age is an important factor the article has been included under the subject heading AGE).

In the case of experimental work on human beings all papers have been listed under MAN. All contributions on women have also been listed under WOMAN.

PART II LIST OF SUBJECT HEADINGS

The problem of *see also* references is a major one in the preparation of any subject index. *Quarterly Cumulative Index Medicus*, *Chemical Abstracts* and *Biological Abstracts* use many *see also* references, until recently, *Current List* solved the problem by not using any. For a complete pattern of *see also* references under a heading such

as VITAMIN B-COMPLEX, the reader should be referred to each member of the complex used as a heading, e g, THIAMIN, RIBOFLAVIN, each disease name under which the effects of either a lack of or the presence of a member of the vitamin B-complex is indexed, e g HYPERTHYROIDISM, BERRI-BERRI, each organ or tissue affected, e g NERVE, each physiological state or reaction, e g CHRONAXIE, and so on. Moreover, each subject heading referred to should also lead to all other subject headings in the original list and back to the vitamin B-complex. The magnitude of such a pattern is such that it can seldom be adhered to consistently throughout an entire index. Such a pattern would also require an enormous amount of space.

Indexers have long questioned how thoroughly *see also* references are used. At best they probably serve only as a reminder to the user of related subject headings under which he might find items of interest. Theoretically the problem would be solved by gathering together all entries under all pertinent specific and general headings. If this procedure were used, it should be followed consistently or the user would be misled and would miss many pertinent entries. There are a number of reasons against its use. The first, of course, is that the large bulk of material which would result would not only make the index exceedingly bulky and expensive, but would also increase the number of entries under each subject heading and reduce the ease with which the index could be scanned. In the second place, it is doubtful if any indexer could manage to list *all* items under *all* related headings so that *all* users could obtain *all* the information needed under *one* subject heading.

In this index, we have attempted to solve the problem of giving the user the information he needs about related subject headings by including lists of subject headings in the introduction. These subject headings have been divided primarily into five of the categories used for indexing, i e ORGAN OR ANATOMICAL SYSTEM, PHYSIOLOGICAL STATES AND FUNCTIONS, PATHOLOGICAL CONDITIONS, CHEMICAL SUBSTANCE AND COMPOUNDS, AND SPECIES OF ANIMAL STUDIED. Each group has been broken into smaller groups, the members of each sub-group having a single axis of categorization in common. The axis used, however, shifts from sub-group to sub-group, e g all body fluids are grouped together on the physical basis of being fluid, all nerves are grouped together on the anatomical basis of being nerves, but all members of the digestive tract are grouped together on the basis of function. The headings given to the various sub-groups should be labeled "subject headings referable to" the digestive tract, to the body fluids, etc., as some terms not strictly following the axis for categorization have been included, e g SWEAT has been placed in the list with fluids. No attempt has been made to arrive at groups which are completely logical—usability not logic has been the guiding principle. Subject headings which did not group conveniently on any one axis used have been allowed to stand alone near a list of related subject headings.

Not all the subject headings have been used. The lists have been kept to a minimum to permit ease of scanning. Many have been left out, especially in the list of chemical subject headings. Where several subject headings begin with the same word or syllable, only the common part of the headings has been used, e g Digit—for DIGITALIS, DIGITOXIN etc. This will provide the user with a clue to the part of the alphabet in which he should look for material on the subject.

It is hoped that the user will make extensive use of these lists when searching for anything except a very specific subject. For example, if he wishes all material on antihistaminics he can find under the major category of CHEMICAL SUBSTANCES the list of antihistaminics indexed, namely, ANTISINE, BENADRYL, DRAMAMINE and PYRIBENZAMINE. He then can look in the index for those in which he is interested. He can also find under PATHOLOGICAL CONDITIONS those pathological conditions in which antihistaminics might have been used, e g ALLERGY, ANAPHYLACTIC SHOCK, TRYPSIN SHOCK etc.

SUBJECT HEADINGS REFERABLE TO ANATOMICAL TERMS

SYSTEMS ¹	PARTS OF BODY		
Autonomic nervous	Body fat	Derma	Gums
Cardiovascular	Breast	Skin	Enamel
Central nervous	Cutaneous appendages	Subcutis	Dentin
Lymphatic	Eyelids		Teeth
Nervous	Finger	Cock's comb	Pulp
Neuromuscular	Foot	Feathers	Periodontal structures
Parasympathetic nervous	Head	Hair	
Reticulo-endothelial	Pelvis	Hair follicles	Lips
Skeletal	Surface area	Lanugo	Mouth
Sympathetic nervous	Toe	Vellus	
Sympathoadrenal			

FLUIDS		BLOOD, FORMED ELEMENTS	RESPIRATORY SYSTEM
Bile	Lymph	Blood cells	Bronchi—
Blood	Pancreatic	Erythrocytes	Diaphragm
Body—	Prostatic	Granulocytes	Lungs
Cerebrospinal	Saliva	Leukemic cells	Nasal mucosa
Colonic	Semen	Leukocytes	Respiratory tract
Extracellular	Serum	Lymphocytes	Trachea
Fluid	Sweat	Macrophages	
Gastric	Synovial	Monocytes	
Interstitial	Urine	Neutrophiles	
Intestinal secretion	Venous	Platelets	
Intracellular		Reticulocytes	

TISSUES AND CELLS			SUPPORTING STRUCTURES
Argentaffine	Collagen	Adipose	Bone
Cells	Cytoplasm	Brown adipose	Cartilage
Fibroblast	Fibers	Endothelium	Joints
Genes	Intercellular cement	Epithelial	Synovial membrane
Histiocytes	Membrane	Hematopoietic	Tendon
Kupffer	Mitochondria	Membranous structures	
Melanophores	Nucleus	Periurethral	
Paneth	Protoplasm	Preputial	
Reticulum		Odontogenic epithelium	
Schwann			

GLANDS	ENDOCRINE GLANDS	URINARY TRACT	EYE
Brunner's	Anterior pituitary	Anal sphincter	Eye
Coagulating	Adrenal	Bladder	Iris
Cowper's	Neurohypophysis	Kidney	Lens
Coxal	Parathyroid	Malpighian tubes	Nictitating membrane
Harderian	Pineal body	Ureter	Pupil
Mammary	Pituitary		Retina
Salivary	Posterior pituitary	MUSCLES	
Sebaceous	Thymus	Extra-ocular	EAR
Sweat	Thyroid	Gastrocnemius	Ear
		Laryngeal	Cochlea
		Muscle	
		Orbital	

¹ Look under names of system, gland, artery or vein, i.e. cardiovascular, Brunner's aorta, ductus venosus

CARDIOVASCULAR SYSTEM		ALIMENTARY TRACT	
Blood vessels	Arteries ¹	Appendix	Pylor—
Capillaries	Aorta	Cecum	Rect—
Foramen ovale	Arter—	Colon	Spleen
Heart	Ductus arteriosus	Epiglottis	Stomach
Luminal vessels	Hepatic	Esophagus	
Pacemakers	Iliac	Gastrointestinal tract	
	Pulmonary	Gall bladder	
	Renal	Gizzard	
VEINS	Umbilical	Intestine	
Ductus venosus		Liver	
Umbilical vein		Pancreas	
Vena cava			
Veins			

NERVES		REPRODUCTIVE SYSTEM	
Articular	Peripheral	Gonads	Corpus luteum
Aortic depressor	Sciatic		Fallopian tubes
Auditory	Splanchnic	Epididymis	Ova
Chorda tympani	Vagus	Male	Uterus
Neuromuscular		Os priapi	Vagina
Optic	Myenteric plexus	Penis	Vulva
		Prostate	
		Seminal vesicles	Umbilical cord
		Sperma	Placenta
		Testes	

NERVOUS SYSTEM		CENTRAL NERVOUS SYSTEM	
Electric organ	Neurons	Brain	Motor cortex
Ganglia	Synapse	Brain stem	Optic chiasma
Gray matter	White matter	Caudate nucleus	Pons
Hemato-encephalic barrier		Cerebellum	Spinal cord
Motoneurons	Aortic body	Cerebral hemispheres,	Striate cortex
Nerve Fibers	Carotid body	cortex	Thalamus
Nerve Nets	Carotid sinus	Diencephalon	Visual cortex
Nerves	Chemoreceptors	Dura mater	Cardio-regulatory center
		Forebrain	Optic tract
		Frontal lobe	Pupillary center
		Geniculate body, lateral	Respiratory center
		Hypothalamus	Vasomotor center
		Lenticular nucleus	Hypothalamico-hypo-
		Medulla oblongata	physial tract

SUBJECT HEADINGS REFERABLE TO PHYSIOLOGICAL STATES OR CONDITIONS²

REPRODUCTION		CNS AND NEUROMUSCULAR	
Anestrus	Reproduction	Activity	Cushing's syndrome
Estrus cycle	Sex	Activity-rest cycle	Nerve conduction
Fertilization	Spermatogenesis	Action curve	Neuromuscular—
Implantation	Parthenogenesis	Adaptation	Pressure, Intracranial
Labor (parturition)	Parturition	Behavior	Sleep
Lactation	Pregnancy	Brain metabolism	Transmission
Masturbation	Puberty	Cerebral blood flow	Vestibular function
Menstruation	Puerperium	Chemoreception	Yawning
Ovulation		Chronaxia	

² See also under organs.

SPECIAL SENSES	CARDIOVASCULAR	REFLEXES	ALIMENTARY
Auditory stimuli	Blood flow	Coordination	Absorption
Cutaneous sense	Blood pressure	Crossed extensor	Appetite
Dark adaptation	Blood volume	Extensor thrust	Defecation
Hearing	Capillary permeability	Flexor	Digestion
Olfactory	Cardiac output	Myotatic	Gastric motility
Sensory discrimination	Circulation	Reflexes	Salivation
Taste (insects)	Erythropoiesis	Scratch	Thirst
Temperature	Hematopoiesis	Vascular	Peristalsis
Touch	Hemolysis		
Vision	Pulse rate		
Warmth	Vasoconstriction		
<hr/>			
METABOLISM	RENAL	POSTURE, MOTION	RESPIRATORY
Basal metabolic rate	Diuresis	Exercise	Minute volume
Dehydration	Glomerular—	Fatigue	Respiration
Detoxication	Renal clearance	Locomotion	Vital capacity
Gluco—	Urination	Posture	
Glyco—			Immunity
Ketolysis	Sweating		Phagocytosis
			Sedimentation rate
<hr/>			
GENERAL			
Acclimatization	Hibernation	Autolysis	Calcification
Age	Homeostasis	Chemotaxis	Differentiation
Body temperature	Osmo—	Oxidation	Mitosis
Diurnal rhythms		Phosphorylation	Mutation
Growth	Adsorption	Proteolysis	Pigmentation
Heat regulation	Alarm reaction		
			Fasting
			Nutritional status

SUBJECT HEADINGS REFERABLE TO PATHOLOGICAL STATES OR CONDITIONS

BLOOD, BLOOD CELLS		CARDIOVASCULAR	
Anemia	Hodgkins disease	Aeroembolism	Leucocytosis
Avian leukosis	Leucocytosis	Atherosclerosis	Orthostatic
Blood dyscrasias	Leukemia	Circulatory failure	Periarthritis
Edema	Leukopoiesis	Hyperemia	Thromb—
Embolism	Poly cythemia	Hypertension	Tachyphaxia
Fibrillation	Pseudo-leukocytoses		
Hemo—			
<hr/>			
BLOOD CONSTITUENTS	DIETARY, METABOLIC		SKIN
Anoxemia	Acidosis	Lipo—	Eczema
Hypercholesteremia	Alkalosis	Obesity	Erythema
Hyperglycemia	Cytosiderosis	Phenylpyruvic	Inflammation
Hypoglycemia	Diabetes	Oligophrenia	Itching
	Inanition	Toxemia	Hyperalgesia
	Ketosis	Xanthom—	Pruritus

GUIDE TO USE OF INDEX

DEFICIENCY DISEASE¹

Achromotrichia
Alkali disease
Anorexia
Black Tongue
Celiac disease
Cheilosis
Deficiency disease
Malignancy factor

Malnutrition
Mineral deficiency
Pellagra
Perosis
Rosaces keratitis
Rickets
Sprue

RESPIRATORY

Anoxia
Asphyxia
Bronchoconstriction
Coughing
Hyperpnea

POISONING

Alcohol
Chloroform
Fluorosis
Lead
Salvarsan
Sulfonal
Snake bite

LIVER

Hemolytic jaundice
Hepatic disease
Hepatitis
Jaundice
Liver, fatty

URINE, EXCRETION

Anuria
Chromoproteinurias
Coproporphrinuria
Fructosuria
Glycosuria
Histidinuria
Lactosuria
Melituria
Tyrosinuria

OPERATIVE PROCEDURES

Adrenalectomy
Chloroform—
Fistula
Hypophysectomy
Nephrectomy
Pancreatectomy
Sternal puncture
Thyroidectomy
Cyclopropane—

CENTRAL NERVOUS SYSTEM

Blind staggers
Concussion
Convulsions
Decerebrate
Decompression
Electroshock
Epilepsy
Ergotism
Gargylism
Hyperphagia
Mental—
Migraine
Motion sickness
Niemann Pick's disease
Paralysis agitans
Peripheral neuropathy
Psychosis
Spasticity
Stuttering
Tay Sachs disease

CAUSED BY INVADERS

Arthritis
Dermatitis
Gingivitis
Glomerular nephritis
Glossitis
Infectious mono—
nucleosis
Lamb dysentery
Malaria
Mastitis
Nephritis
Osteosclerosis
Pneumonia
Tuberculosis

ALLERGIC

Allergy
Anaphylaxis
Trypsin shock
Erythroblastosis

REPRODUCTIVE

Anovulation
Gynecomastia
Hermaphroditism
Homosexuality
Pseudopregnancy
Sterility
Turner's syndrome

ENDOCRINE

Goiter
Graves' disease
Hyperthyroidism
Myxedema

Addison's disease
Hyperinsulinism
Hyperparathyroidism

Gangrene
Necrosis
Pain

Metastasis
Neoplasms

Blast injury
Crush syndrome
Death
Decompression sickness
Drowning

Mountain sickness
Shock
Stress
Trauma
Wounds

Collagen disease
Dental caries
Periodontal disease
Silico

Constipation
Vomiting

¹ See also under name of substance, e.g. thiamin deficiency

SUBJECT HEADINGS REFERABLE TO CHEMICAL SUBSTANCES

ELEMENTS AND COMPOUNDS

Cations and Elements

Ammonia	Fluorine	Molybdenum	Silver
Antimony	Gold—	Nickel	Sodium
Argon	Helium	Nitrogen	Strontium
Arsenic	Hydrogen	Oxygen	Sulfur
Beryllium	Iodine—	Palladium	Tellurium
Bismuth	Iron	Phosphorus	Thorium
Cadmium	Krypton	Potassium	Tungsten
Calcium	Lead	Radium	Vanadium
Carbon	Magnesium	Radon	Zinc
Copper	Manganese	Selenium	Zirconium
Cobalt	Mercury	Silica	

Anions

Acetate	Chlorides	Iodides	Sulfate
Bicarbonate	Chromates	Nitrites	Sulphydryl group
Bromides	Citrate	Onium salts	Thiocyanates
Carbonate	Cyanide	Periodate	Thiols
Carbon dioxide	Fluoride	Phosphate	

FOOD AND TISSUE CONSTITUENTS

Carbohydrates

Arabinose	Heparin
Carbohydrate	Hexose phosphates
Fructose	Mannose
Galactose	Saccharose
Glucose	Sugars
Glycogen	Xylose

Lipids

Aminoethanol cephalin	Inositolphosphatides
Caproic acid	Lecithins
Cardiolipin	Linoleic acid
Cerebrosides	Linolenic acid
Cholesterol	Lipids
Choline	Lipins
Chondroitin sulfate	Lipoids
Fat	Phosphatides
Fatty acids	Phospholipids
Gangliosides	Plasmalogens
Glycerol	Sphingomyelins
Inositol	Sphingosine
	Triacetin

Proteins

Albumoid	Apoferitin	Globin	Peptides
Albumin	Avidin	Globulin	Protein
Actomyosin	Carnosine	Hemoglobin	Thymine
Adenylic acid	Cytosine	Mucins	Visual Purple
Adenosine	Ferritin	Myelin	
Adenine	Fibrinogen	Nucleoproteins	

Amino Acids

Alanine	Lysine
Amino acids	Methionine
Arginine	Non protein nitrogen
Asparagine	Nor leucine
Aspartic acid	Nor valine
Cysteine	Ornithine
Dopa	Phenylalanine
Ethionine	Proline
Glutamate	Ribonucleic acid

Metabolites

Acetoacetate	Lactate
Acetoin	Malate
Acetone	Malonate
Acetopyruvate	Oxalacetate
Acetyl	Oxalate
Creatine	Oxalosuccinate
Creatinine	Pyruvate
Glycerophosphate	Phosphoglycerate
Glyceraldehyde	Succinate

GUIDE TO USE OF INDEX

Glutamine	Serine	Hydroxyacetoacetate	Trigonelline
Glycine	Threonine	Isocitric acid	Urea
Glycinin	Tryptophan	Keto acids	Xanthopterin
Histidine	Tyrosine	α -Ketoglutarate	Xanthine
Isoleucine	Valine		
Leucine			

Vitamins

Energy rich phosphates	Growth factors	Folic acid	Ascorbic acid
Glutathione	Niacin	Pteroylheptaglutamic acid	Biotin
Phosphocreatine	Nicotinamides	Pteroyltriglutamic acid	Carotene
Adenosine triphosphate	Pantothenic acid		Cod liver oil
Phosphagen	Riboflavin		
	Thiamin	Pyridoxal	Calciferol
Inosine	Tocopherols	Pyridoxine	Dihydrotachysterol
Nucleotides			Irradiated ergosterol
Uric acid			
Uracil			Vitamin—

DRUGS

CNS Depressants

Avertin	Allylisopropyl barbituric acid	Ipral	Anticonvulsants
Anesthetic gases	Amytal	Luminal	Dilantin
Chloral hydrate	Barbituric acid	Novasurol	Mesantoin
Cyclopropane	Barbital	Ortal	Mebaral
Ether	Dial	Pentobarbital	Paralidone
Nitrous oxide	Evip—	Phenobarbital	Phenylthienylhydantoin
Paraldehyde		Seconal	Trimethadione

Salicylates

Local Anesthetics

Procaine	Antergan
Cocaine	Antihistaminics
	Antistine
Anthelmintic Agents	Benadryl
Arcoline	Dramamine
	Pyribenzamine

Carbarsone

Antihistaminics

Anticoagulants
Dicumarol
Coagulants
Irritants

CNS Stimulants

Amphetamine	Picrotoxin
Caffeine	Theobromine
Coramine	Theocin
Metrazol	Theophylline
Nicotine	Strychnine

Alkaloids

Abrin	Lupanine
Alkaloids	Muscarine
Germerine	Protoverine
Guanidine	Pseudojervine
Jervine	Rubijervine
Lobeline	Veratramine

Salycgan	Insecticides	Morphine	Digit—
	Pyrethrum		
Lysergic acid		Curare	Ergot Derivatives
Yohimbine	Atabrine	Quarternaryonium compounds	Ergot
		Apomorphine	Tyramine

Sulfa Drugs

Proguanil
Sulfanilamides
Sulfonamides

Sympathomimetic Drugs

Ephedrine
Methodrine
Prostigmone
Sympathomimetic amines

Atropine-like

Atropine
Belladonna alkaloids
Homatropine
Hyoscyamine
Hyoscine

ENZYMES

<i>Co-enzymes</i>	<i>Oxidation Reduction</i>	<i>Ester Hydrolyzing</i>	<i>Carbohydrate Hydrolyzing</i>
Respiratory enzymes	Amine oxidase	ATP ase	Amylase
Coenzymes	Amino acid oxidase	Cerebrosidase	Invertase
Dehydrogenase	Dopa oxidase	Cholinesterases	Lactase
Cytochrome	Lactic dehydrogenase	Esterase	Maltase
Diphosphopyridine nucleotide	Peroxidases	Lipase	
Triphosphopyridine nucleotide	Phenol oxidase	Lecithinase	<i>Non peptide C-N hydro- lyzing</i>
Zwischenferment	Polyphenol oxidase	Lecitholipases	Arginase
	Succinoxidase	Phosphatases	Urease
	Trypsinase	Phosphorylases	
	Uricase	Transphosphorylase	
	Xanthine oxidase		

Protein Hydrolyzing

			<i>Carboxylases</i>
Aminopolypeptidase	Chymotrypsin	Leucine aminopeptidase	Carboxylases
Carboxypeptidase	Enterokinase	Pepsin	Coccarboxylase
Carboxypolypeptidase	Erepsin	Papaun	Oxalacetate B-carboxylase
Catheptic enzymes	Glycyl 1 leucine peptidase	Peptidases	Oxalosuccinate carboxylase
Cathepsin		Trysin	

Miscellaneous

Antrenin	Enolase	Hyaluronidase	Receptor destroying enzymes
Apodehydrase	Enzymes	Hypertensinase	Renin
Apozymase	Fibrinogenase	Lysins	Succino-dehydrase
Carbonic anhydrase	Hemolysins	Lysozyme	Thiaminase
Catalase	Hexokinase	Phosphoglucomutase	Vesiculase
Dehydrase	Holozymase	Prothrombin	

Enzyme Inhibitors and Antimetabolites

		<i>Anticholinesterases</i>	
3 Acetyl-pyridine	Fluoroacetic acid	Anticholinesterases	Physostigmine
Alloxan	Inhibitors (metabolic)	DFP	8-Quinolyldiethyl thiophosphate
Avidin	Iodoacetate	Hexaethyltetraphosphate	Tetraethylpyrophosphate
Azide	Mustard gas		
Bal	Phlorhizin		
Carbon monoxide	Thiourea		
Colchicine			

HORMONES

Pituitary

			<i>Androgens</i>
Antidiuretic hormone	Diabetogenic	Luteinizing	Androstadien
Antihormones	Follicle stimulating	Oxytocic	Dehydroisoandrosterone
Hormones	Gonadotropic	Pitocin	Testosterone
		Pitressin	
Adrenocorticotropic	Growth	Pituitary	
Anterior pituitary	Lactogenic	Pituitrin	

Adrenal Gland

		<i>Estrogens etc</i>	
Adrenocortical	Adrenalone	Estrin	Chorionic
Biocorticoids	Epinephrine	Estradiol	Gonadotropin
Corticosterone	Nor-epinephrine	Hexestrol	Emmenin
Oxysteroids (11 and 17)	Sympathin	Progest—	Placental extracts
			Stilbestrols
			Steroids

Gastrointestinal

		<i>Other</i>	
Cholecystokinin	Gastrin	Duodotyrosine	Insulin
Duocinin	Pancreozymin	Parathyroid	Lipocalc
Enteroanethelon	Secretin	Thyroxin	
Enterocinin	Urogastrone		Acetylcholine
Enterogastrone	Villicinin		Acetyl beta methyl choline

MISCELLANEOUS

Diets

Agglutinins
Amboceptors
Antibodies
Antigens
Complement
Fibrinolysin
Opsonins
Rh blood factor
Thromboplastin
Thrombin

Cabbage
Carbohydrate
Diet
Ketogenic

Betaine
Choline
Lipocac
Lipotropic factors

Bile acids
Bile pigments
Bilirubin
Taurocholate

Angiotonin
Hypertensionogen
Pepsitensin

Toxins, Venoms, etc

Botulinus
Cobra
Diphtheria
Dysentery
Methylguanidine
Mussel poison
Scorpion
Snake
Staphylococcus
Tetanus
Toxins
Venoms

Foods

Beef
Bread
Brussel sprouts
Butter fat
Carrots
Cereals
Cod liver oil
Corn
Egg
Flour
Food
Milk—
Mineral oil
Oils
Onion

Pigments, Dyes

Adrenochrome
Alizarin
Aniline dyes
Bismark brown
Brilliant green
Butter yellow
Chromodoris zebra pig-
ment
Congo red
Dyes
Eosin
Evans blue

Hallachrome
Janus green
Melanin
Methylene blue
Mxochrome
Nile blue
Phenol red
Pigments
Safranin
Toluidine blue
Trypan blue

SUBJECT HEADINGS REFERABLE TO SPECIES OF ANIMALS

MICROORGANISMS

Aerobacter
Bacteria
Bacteriophage
Clostridium—
Escherichia coli
Lactobacill—
Microorganisms

Pneumococcus
Propionibacterium
pentosaceum
Proteus vulgaris
Pyrogenic bacteria
Serratia marcesans
Spirochaetes

Streptococci
Streptococcus durans
Streptomyces
Tetrhymena gelele
Tubercle bacillus
Virus

Characeae

Halocystis
Molds
Neurospora
Spirogyra
Yeast

INVERTEBRATES

Ameba
Hemoflagellates
Intestinal flagellates
Malarial parasites
Paramecia
Sporozoa
Protozoa
Trypanosoma
Vorticella

Coelenterata
Jellyfish
Pysalia filaments

Ctenophora

Helminths

Cerbratulus
Echinococcus
Flatworms
Nemertea
Parasitic worms
Plathelminths
Taenia

Aphrodite
Annelida
Arenicola
Earthworm
Leech
Lumbucus
Urechis

Ponfero—

Ancylostoma
Nemathelminthes
Nippostrongylus
Trichinella

ENZYMES

Co-enzymes

Respiratory enzymes
Coenzymes
Dehydrogenase
Cytochrome
Diphosphopyridine
nucleotide
Triphosphopyridine
nucleotide
Zwischenferment

Oxidation Reduction

Amine oxidase
Amino acid oxidase
Dopa oxidase
Lactic dehydrogenase
Peroxidases
Phenol oxidase
Polyphenol oxidase
Succinoxidase
Trypsinase
Uricase
Xanthine oxidase

Ester Hydrolyzing

ATP-ase
Cerebrosidase
Cholinesterases
Esterase
Lipase
Lecithinase
Lecitholipases
Phosphatases
Phosphorylases
Transphosphorylase

Carbohydrate Hydrolyzing

Amylase
Invertase
Lactase
Maltase

*Non peptide C-N hydro-
lyzing*
Arginase
Urease

Protein Hydrolyzing

Aminopolypeptidase
Carboxypeptidase
Carboxypolypeptidase
Catheptic enzymes
Cathepsin

Chymotrypsin
Enterokinase
Erepsin
Glycyl 1 leucine peptidase

Leucine aminopeptidase
Pepsin
Papain
Peptidases
Trysin

Carboxylases

Carboxylases
Cocarboxylase
Oxalacetate B-carboxylase
Oxalosuccinate carboxyl-
ase

Miscellaneous

Antirenin
Apodehydrodrase
Apozymase
Carbonic anhydrase
Catalase
Dehydrodrase

Enolase
Enzymes
Fibrinogenase
Hemolysins
Hexokinase
Holozymase

Hyaluronidase
Hypertensinase
Lysins
Lysozyme
Phosphoglucomutase
Prothrombin

Receptor destroying en-
zymes
Renin
Succino-dehydrodrase
Thiaminase
Vesiculase

Enzyme Inhibitors and Antimetabolites

3-Acetyl pyridine
Alloxan
Avidin
Azide
Bal
Carbon monoxide
Colchicine
Fluoroacetic acid
Inhibitors (metabolic)
Iodoacetate
Mustard gas
Phlorhizin
Thiourea

Anticholinesterases

Anticholinesterases
DFP
Hexaethyltetraphosphate
Physostigmine
8-Quinolyldiethylthio-
phosphate
Tetraethylpyrophosphate

HORMONES

Pituitary

Antidiuretic hormone
Antihormones
Hormones

Diabetogenic
Follicle stimulating
Gonadotropic

Luteinizing
Oxytocic
Pitocin
Pitressin
Pituitary
Pituitrin

Androgens

Androstadien
Dehydroisoandrosterone
Testosterone

Adrenocorticotrophic
Anterior pituitary

Growth
Lactogenic

Adrenal Gland

Adrenocortical
Biocorticoids
Corticosterone
Oxyteroids (11 and 17)

Adrenalone
Epinephrine
Nor-epinephrine
Sympathin

Estrogens etc

Estrin
Estradiol
Hexestrol

Progest—

Chorionic
Gonadotropin
Emmenin
Placental extracts
Stilbestrols
Steroids

Gastrointestinal

Cholecystokinin
Duocinin
Enteroanthelone
Enterocrinin
Enterogastrone
Gastrin
Pancreozymin
Secretin
Urogastrone
Villikinin

Other

Dinodotyrosine
Parathyroid
Thyroxin

Insulin
Lipocaine

Acetylcholine
Acetyl beta methyl
choline

MISCELLANEOUS

<i>Diets</i>			
Agglutinins	Cabbage	Betaine	Bile acids
Amboceptors	Carbohydrate	Choline	Bile pigments
Antibodies	Diet	Lipocarc	Bilirubin
Antigens	Ketogenic	Lipotropic factors	Taurocholate
Complement			
Fibrinolysin			Angiotonin
Opsonins			Hypertensionogen
Rh blood factor			Pepsitensin
Thromboplastin			
Thrombin			

<i>Toxins, Venoms, etc</i>	<i>Foods</i>	<i>Pigments, Dyes</i>	
Botulinus	Beef	Adrenochrome	Hallachrome
Cobra	Bread	Alizarin	Janus green
Diphtheria	Brussel sprouts	Aniline dyes	Melanin
Dysentery	Butter fat	Bismark brown	Methylene blue
Methylguanidine	Carrots	Brilliant green	Myochrome
Mussel poison	Cereals	Butter yellow	Nile blue
Scorpion	Cod liver oil	Chromodorus zebra pigment	Phenol red
Snake	Corn	Congo red	Pigments
Staphylococcus	Egg	Dyes	Safranin
Tetanus	Flour	Eosin	Toluidine blue
Toxins	Food	Evans blue	Trypan blue
Venoms	Milk—		
	Mineral oil		
	Oils		
	Onion		

SUBJECT HEADINGS REFERABLE TO SPECIES OF ANIMALS

MICROORGANISMS

Aerobacter	Pneumococcus	Streptococci	Characeae
Bacteria	Propionibacterium	Streptococcus durans	
Bacteriophage	pentosaceum	Streptomyces	Halicystis
Clostridium—	Proteus vulgaris	Tetrahymena gelele	Molds
Escherichia coli	Pyrogenic bacteria	Tubercle bacillus	Neurospora
Lactobacill—	Serratia marcescens	Virus	Spirogyra
Microorganisms	Spirochaetes		Yeast

INVERTEBRATES

Ameba	Coelenterata	Cerbratulus	Aphrodite
Hemoflagellates	Jellyfish	Echinococcus	Annelida
Intestinal flagellates	Pvsaia filaments	Flatworms	Arenicola
Malarial parasites		Nemertea	Earthworm
Paramecia	Ctenophora	Parasitic worms	Leech
Sporozoa		Plathelminths	Lumbricus
Protozoa	Helminths	Taenia	Urechis
Trypanosoma			
Vorticella		Ancylostoma	
		Nemathelminthes	
Porifero—		Nippostrongylus	
		Trichinella	

ENZYMES

<i>Co-enzymes</i>	<i>Oxidation Reduction</i>	<i>Ester Hydrolyzing</i>	<i>Carbohydrate Hydrolyzing</i>
Respiratory enzymes	Amine oxidase	ATP-ase	Amylase
Coenzymes	Amino acid oxidase	Cerebrosidase	Invertase
Dehydrogenase	Dopa oxidase	Cholinesterases	Lactase
Cytochrome	Lactic dehydrogenase	Esterase	Maltase
Diphosphopyridine nucleotide	Peroxidases	Lipase	
Triphosphopyridine nucleotide	Phenol oxidase	Lecithinase	<i>Non-peptide C-N hydrolyzing</i>
Zwischenferment	Polyphenol oxidase	Lecitholipases	Arginase
	Succinoxidase	Phosphatases	Urease
	Trypsinase	Phosphorylases	
	Uricase	Transphosphorylase	
	Xanthine oxidase		
<i>Protein Hydrolyzing</i>			<i>Carboxylases</i>
Aminopolypeptidase	Chymotrypsin	Leucine aminopeptidase	Carboxylases
Carboxypeptidase	Enterokinase	Pepsin	Cocarcboxylase
Carboxypolypeptidase	Erepsin	Papain	Oxalacetate B-carboxylase
Catheptic enzymes	Glycyl 1 leucine peptidase	Peptidases	Oxalosuccinate carboxylase
Cathepsin		Trypsin	
<i>Miscellaneous</i>			
Antirenin	Enolase	Hyaluronidase	Receptor destroying enzymes
Apodehydrase	Enzymes	Hypertensinase	Renin
Apozymase	Fibrinogenase	Lysins	Succino-dehydrase
Carbonic anhydrase	Hemolysins	Lysozyme	Thiaminase
Catalase	Hexokinase	Phosphoglucomutase	Vesiculase
Dehydrase	Holozymase	Prothrombin	
<i>Enzyme Inhibitors and Antimetabolites</i>		<i>Anticholinesterases</i>	
3 Acetyl-pyridine	Fluoroacetic acid	Anticholinesterases	Physostigmine
Alloxan	Inhibitors (metabolic)	DFP	8-Quinolyl-diethyl thiophosphate
Avidin	Iodoacetate	Hexaethyltetraphosphate	Tetraethylpyrophosphate
Azide	Mustard gas		
Bal	Phlorhizin		
Carbon monoxide	Thiourea		
Colchicine			
<i>HORMONES</i>			
<i>Pituitary</i>			<i>Androgens</i>
Antidiuretic hormone	Diabetogenic	Luteinizing	Androstadien
Antihormones	Follicle stimulating	Oxytocic	Dehydroisoandrosterone
Hormones	Gonadotropic	Pitocin	Testosterone
		Pitressin	
Adrenocorticotropic	Growth	Pituitary	
Anterior pituitary	Lactogenic	Pituitrin	
<i>Adrenal Gland</i>		<i>Estrogens etc</i>	
Adrenocortical	Adrenalone	Estrin	Chorionic
Bio-corticoids	Epinephrine	Estradiol	Gonadotropin
Corticosterone	Nor-epinephrine	Hexestrol	Emmenin
Oxysteroids (11 and 17)	Sympathin	Progest—	Placental extracts
			Stilbestrols
			Steroids
<i>Gastrointestinal</i>		<i>Other</i>	
Cholecystokinin	Gastrin	Duodotyrosine	Insulin
Duocinin	Pancreozymin	Parathyroid	Lipocain
Enteranthelone	Secretin	Thyroxin	
Enterocinin	Urogastrone		Acetylcholine
Enterogastrone	Villikinin		Acetyl beta methyl choline

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Ariolimax	Arthropoda	Bed bugs	Himantarium
Cephalopoda		Cockroach	Julus
Clam	Crustacea	Coleoptera	Myriapoda
Helix	Homarus	Diptera	Scolopendra
Lima	Xiphosura	Drosophila	
Loligo		Honeybee	Ascidia
Mollusca	Arachnida	Hymenoptera	Ciona
Mytilus	Scorpions		
Octopus	Spiders	Insects	
Pleurobranchia		Isoptera	
Sepia		Leanders	
Squid		Lepidoptera	
		Maia	
Echinoderms		Orthoptera	
Sea Urchin Egg		Siphonaptera	

VERTEBRATES

Elasmobranchs	Hagfish	Ameiurus	Amphibia
Electric fish	Lamprey	Catfish	Frog
Electrophorus	Raja	Fish	Proteidae
Gymnotus	Torpedo	Ganoid Fishes	Salmander
		Lung fish	Toad
		Salmon	
			Lizard
			Reptiles
			Turtle
Capon	Finches	Beaver	Muskrat
Chick	Fowls	Ferret	Pocket gopher
Chicken	Owls	Guinea Pig	Rabbit
Duck	Pigeon	Hamster	Rat
Goose	Sparrow	Hare	Shrew
	Turkey	Mole	Squirrel
		Mouse	
Baboon	Mammals, diving	Cattle	Bat
Chimpanzee	Manatee, Florida	Dog	Elephant
Man	Mink	Goat	Hippopotamus
Monkey	Porpoise	Horse	Opossum
Primates	Rorqual, common	Mule	Platypus
	Sea elephant	Ox	Water buffalo
	Sea lion		
	Seal	Ruminants	
	Whales	Sheep	
		Swine	

MISCELLANEOUS

Female	Aged	Negroes	Buds
Male	Children	Race	Leaves
Woman	Embryo		Roots
	Fetus		
	Infant (human)		Plants
	Maternal organism		Seeds
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